Do political protests matter? Evidence from the Tea Party movement

Madestam, Andreas ; Shoag, Daniel ; Veuger, Stan ; Yanagizawa-Drott, David

Abstract: Can protests cause political change, or are they merely symptoms of underlying shifts in policy preferences? We address this question by studying the Tea Party movement in the United States, which rose to prominence through coordinated rallies across the country on Tax Day, April 15, 2009. We exploit variation in rainfall on the day of these rallies as an exogenous source of variation in attendance. We show that good weather at this initial, coordinating event had significant consequences for the subsequent local strength of the movement, increased public support for Tea Party positions, and led to more Republican votes in the 2010 midterm elections. Policy making was also affected, as incumbents responded to large protests in their district by voting more conservatively in Congress. Our estimates suggest significant multiplier effects: an additional protester increased the number of Republican votes by a factor well above 1. Together our results show that protests can build political movements that ultimately affect policy making and that they do so by influencing political views rather than solely through the revelation of existing political preferences.

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I. Appendix Tables

Table A 1. Summary Statistics by District and Rainfall

	Rain	No Rain	Difference
	(1)	(2)	(3)
Weather April 15, 2009			
Precipitation (hundredths of inches)	0.351	0.010	0.341***
	(0.030)	(0.002)	(0.026)
Probability of Rain	0.282	0.218	0.064**
	(0.013)	(0.024)	(0.018)
Election 2008			
Republican House Vote (percent of votes)	40.102	41.711	-1.608
	(3.077	(2.439)	(3.989)
Republican House Votes (percent of population)	17.319	16.535	0.784
	(1.542)	(1.103)	(1.882)
Votes for Obama (percent of votes)	55.446	52.956	2.490
	(2.528)	(2.143)	(3.264)
Democratic House Votes (percent of population)	22.936	20.990	1.946
	(0.971)	(1.268)	(1.586)
Total House Votes (percent of population)	41.087	38.696	2.391
	(1.926)	(1.604)	(2.474)
Election 2006			
Republican House Vote (percent of votes)	40.319	42.954	-2.635
	(3.404)	(1.934)	(3.885)
Republican House Votes (percent of population)	14.649	13.783	0.866
	(1.093)	(0.986)	(1.352)
Democratic House Votes (percent of population)	11.824	11.515	0.308
	(1.217)	(0.775)	(1.419)
Total Votes (percent of population)	26.987	25.998	0.989
	(1.942)	(1.454)	(2.286)
Winning Party, Past Two Elections			
Republicans 2006 and 2008 (dummy variable=1)	0.381	0.409	-0.027
	(0.056)	(0.038)	(0.067)
Republicans 2006 and Democrats 2008 (dummy variable=1)	0.007	0.010	-0.003
	(0.011)	(0.006)	(0.009)
Republicans 2008 and Democrats 2006 (dummy variable=1)	0.086	0.054	0.032
	(0.019)	(0.018)	(0.029)
Democrats 2006 and 2008 (dummy variable=1)	0.525	0.527	-0.002
	(0.007)	(0.006)	(0.077)
Demographic Controls 2009			
Median Household Income	51,918	52,016	-98
	(2,613)	(1,824)	(2,967)
Unemployment Rate (percent)	10.396	9.815	0.582
	(0.572)	(0.385)	(0.613)
Population	698,308	707,236	-8,928
	(12,133)	(10,054)	(14,492)
Rural Population (percent)	21.462	20.806	0.656
	(3.478)	(3.189)	(4.612)
White Population (percent)	73.877	75.083	-1.206
	(3.259)	(2.649)	(4.374)
African-American Population (percent)	16.223	10.851	5.372**
	(1.878)	(1.486)	(2.365)
Foreign-Born Population (percent)	11.291	13.089	-1.797
	(2.817)	(2.730)	(3.905)
Hispanic Population (percent)	9.674	18.231	-8.557*
	(2.344)	(4.280)	(4.930)
Number of observations	139	296	

Note: The unit of analysis is a congressional district. It is defined as rainy if there was significant rain in the district (at least 0.1 inches) on the rally day (April 15, 2009). The variables and the data sources are described in Section III (Data and Summary Statistics), Section IV.A (Specifications and Hypotheses), and in the Appendix. Robust standard errors in parentheses, clustered at the state level. The column $Difference$ reports *** 1% , ** 5% , * 10% significance.

Table A 2. Summary Statistics by County, District, and Rainfall, Voting Outcomes in Levels

	Counties			Districts		
	Rain	No Rain	Difference	Rain	No Rain	Difference
	(1)	(2)	(3)	(4)	(5)	(6)
Election 2008						
Republican House Votes ('000)	21.900	16.238	5.662	123.250	118.429	4.821
	(4.050)	(2.273)	(4.252)	(11.051)	(7.959)	(13.125)
Democratic House Votes ('000)	26.697	19.747	6.950	158.186	146.145	12.041
	(5.520)	(3.756)	(6.388)	(5.561)	(7.715)	(9.487)
Total House Votes ('000)	49.568	37.142	12.426	287.250	272.925	14.326
	(9.646)	(6.071)	(10.716)	(12.522)	(10.187)	(15.330)
Election 2006						
Republican House Votes ('000)	14.880	11.101	3.779	100.464	95.463	5.000
	(2.738)	(1.630)	3.779	(6.249)	(6.139)	(8.041)
Democratic House Votes ('000)	17.122	12.780	4.343	83.771	81.860	1.911
	(3.867)	(2.429)	(4.389)	(8.365)	(5.119)	(9.506)
Total Votes ('000)	32.638	24.557	8.081	187.959	182.186	5.773
	(6.621)	(4.104)	(7.388)	(11.892)	(8.960)	(13.952)
Number of observations	588	2,170		139	296	

Note: The unit of analysis in columns 1-3 is a county and in columns 4-6 a congressional district. It is defined as rainy if there was significant rain in the county or district (at least 0.1 inches) on the rally day (April 15, 2009). The variables and the data sources are described in Section III (Data and Summary Statistics), Section IV.A (Specifications and Hypotheses), and in the Appendix. Robust standard errors in parentheses, clustered at the state level. The column $Difference$ reports *** 1% , ** 5% , * 10% significance.

Table A 3. a. County-Level Summary Statistics

	Counties		
	Obs	Mean	S.D.
Weather April 15, 2009			
Precipitation (hundredths of inches)	2,758	0.088	0.208
Probability of Rain	2,758	0.209	0.085
Rainy Protest, rainfall above 0.10 inch	2,758	0.213	0.410
Tea Party Protests April 15, 2009			
% of pop. mean	2,758	0.0729	0.294
Persons, '000, mean	2,758	0.160	0.742
% of pop. max	2,758	0.153	0.615
Persons, '000, max	2,758	0.293	1.286
Tea Party Organizers, 2010			
% of pop.	2,758	0.0741	0.472
Persons, '000	2,758	0.0572	0.155
Tea Party Protesters, 2010			
% of pop.	2,758	0.0203	0.305
Persons, '000	2,758	0.0691	0.667
PAC Contributions 2009-10			
$, per capita	2,758	0.00749	0.0339
$, '000	2,758	1.043	5.061
*Republican Votes, U.S. House 201*0			
% of pop.	2,758	19.60	6.953
% of votes	2,758	61.18	16.25
Votes, '000	2,758	14.88	35.61
Demographic Controls 2009			
Median Household Income	2,758	42,744	10,893
Unemployment Rate (percent)	2,758	9.033	3.278
Population	2,758	99,354	322,404
White Population (percent)	2,758	87.006	15.234
African-American Population (percent)	2,758	8.658	13.97
Foreign-Born Population (percent)	2,758	4.267	5.311
Hispanic Population (percent)	2,758	8.510	13.56
Demographic Controls 2000			
Rural Population (Percent)	2,758	59.60	30.71
Tea Party Movement			
Tea Party Express Donations pre-Tax Day 2009 ('000)	2,758	0.0198	0.169
Election 2008			
Republican House Vote (percent of votes)	2,758	51.52	22.44
Republican House Votes ('000)	2,758	17.45	41.80
Republican House Votes (percent of population)	2,758	22.32	10.61
Votes for Obama (percent of votes)	2,758	41.26	13.71
Democratic House Votes ('000)	2,758	21.23	72.24
Democratic House Votes (percent of population)	2,758	19.81	10.21
Total House Votes ('000)	2,758	39.79	111.8
Total House Votes (percent of population)	2,758	43.14	9.041
Election 2006			
Republican House Vote (percent of votes)	2,758	0.518	0.200
Republican House Votes ('000)	2,758	11.91	28.94
Republican House Votes (percent of population)	2,758	16.16	7.799
Democratic House Votes ('000)	2,758	13.71	45.20
Democratic House Votes (percent of population)	2,758	14.55	8.088
Total Votes ('000)	2,758	26.28	72.41
Total Votes (percent of population)	2,758	31.37	9.859

Note: The unit of analysis is a county. The variables and the data sources are described in Section III (Data and Summary Statistics), Section IV.A (Specifications and Hypotheses), and in the Appendix.

Table A 3. b. District-Level Summary Statistics

	Districts		
	Obs	Mean	S.D.
Weather April 15, 2009			
Precipitation (hundredths of inches)	435	0.119	0.202
Probability of Rain	435	0.238	0.100
Rainy Protest, rainfall above 0.10 inch	435	0.319	0.467
Republican Votes, U.S. House 2010			
% of votes	435	50.86	19.29
Policymaking			
ACU Score 2009	435	41.14	42.96
ACU Score 2010	435	41.45	44.13
Retired Republicans	435	0.0447	0.207
Retired Democrats	435	0.0469	0.212
Demographic Controls 2009			
Median Household Income	435	51,985	13,875
Unemployment Rate (percent)	435	10.00	2.734
Population	435	704,384	73,848
White Population (share)	435	0.746	0.173
African-American Population (share)	435	0.126	0.147
Foreign-Born Population (share)	435	0.125	0.111
Hispanic Population (share)	435	0.155	0.175
Demographic Controls 2000			
Rural Population (share)	435	0.210	0.198
Election 2008			
Republican House Vote (percent of votes)	435	41.19	22.49
Republican House Votes ('000)	435	120.0	70.40
Republican House Votes (percent of population)	435	0.168	0.0953
Votes for Obama (percent of votes)	435	53.75	14.82
Democratic House Votes ('000)	435	150.0	57.39
Democratic House Votes (percent of population)	435	0.216	0.0881
Total House Votes ('000)	435	277.5	67.97
Total House Votes (percent of population)	435	0.395	0.0927
Election 2006			
Republican House Vote (percent of votes)	435	42.11	22.36
Republican House Votes ('000)	435	97,061	41,380
Republican House Votes (percent of population)	435	0.141	0.0641
Democratic House Votes ('000)	435	82,470	48,836
Democratic House Votes (percent of population)	435	0.116	0.0680
Total Votes ('000)	435	184,031	56,405
Total Votes (percent of population)	435	0.263	0.0823
Winning Party, Past Two Elections			
Republicans 2006 and 2008 (dummy variable=1)	435	0.400	0.490
Republicans 2006 and Democrats 2008 (dummy variable=1)	435	0.009	0.095
Republicans 2008 and Democrats 2006 (dummy variable=1)	435	0.064	0.245
Democrats 2006 and 2008 (dummy variable=1)	435	0.526	0.499

Note: The unit of analysis is a congressional district. The variables and the data sources are described in Section III (Data and Summary Statistics), Section IV.A (Specifications and Hypotheses), and in the Appendix.

Table A 3. c. Summary Statistics, ANES Survey 2010

	Individuals		
	Obs	Mean	S.D.
Political Beliefs			
Supports the Tea Party movement	1,146	0.120	0.323
Favorable view on Sarah Palin	1,140	0.311	0.461
Feels outraged about the way things are going in the country	1,142	0.174	0.379
Opposes raising taxes on income >$250K	1,140	0.228	0.418
Believes Americans today have less freedom compared to 2008	1,138	0.438	0.496
Unfavorable feelings towards President Obama	1,145	0.245	0.431
Reported likelihood of voting in the 2010 midterm election	1,092	0.701	0.398
Demographic Controls			
Age	1,146	49.032	16.733
Education, Categorical (1-4)	1,146	2.778	1.035
Household Income, Categorical (1-19)	1,146	10.945	4.293
Currently Working (share)	1,146	0.541	0.498
White (share)	1,146	0.803	0.398
African American (share)	1,146	0.094	0.292
Hispanic (share)	1,146	0.076	0.266
Foreign Born (share)	1,146	0.028	0.159
Rural (share)	1,146	0.178	0.382
Voted for the Republican Party to the House of Representatives, 2008 (share of all votes)	1,146	0.348	0.477

Note: The unit of analysis is a survey respondent from the 2010 ANES survey data. The variables and the data sources are described in Section III (Data and Summary Statistics), Section IV.A (Specifications and Hypotheses), and in the Appendix.

Table A 4. Exogeneity Check at the County Level, Voting Outcomes in Levels and PAC Contributions

	Republican Votes, U.S. House 2008		Democratic Votes, U.S. House, 2008		Turnout, U.S. House 2008		PAC Contributions 2009 pre-protests	
Dependent Variable	Votes, '000		Votes, '000		Votes, '000		$, per capita	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Rainy Protest	0.13	0.18	0.71	0.81	0.58	0.73	0.00006	0.00007
	(0.57)	(0.59)	(0.96)	(0.86)	(1.16)	(1.04)	(0.00008)	(0.00008)
Observations	2,758	2,758	2,758	2,758	2,758	2,758	2,758	2,758
R-squared	0.96	0.98	0.98	0.98	0.98	0.98	0.02	0.03
Election Controls	Y	Y	Y	Y	Y	Y	Y	Y
Demographic Controls	N	Y	N	Y	N	Y	N	Y
Dep. Var. Mean	17.4	17.4	21.2	21.2	39.8	39.8	0.0002	0.0002

Note: The unit of analysis is a county. *Rainy Protest* is based on the precipitation amount in the county on the rally day (April 15, 2009). The dummy variable is equal to one if there was significant rain in the county (at least 0.1 inches) and zero otherwise. All regressions include flexible controls for the probability of rain, population, and region fixed effects. The 2006 election controls account for the outcomes of the U.S. House of Representatives elections in 2006. In the level regressions we include the Republican Party vote share, the total number of votes for the Republican Party, the total number of votes for the Democratic Party, and total turnout. The per-capita regressions include the Republican Party vote share, the number of votes for the Republican Party per capita, the number of votes for the Democratic Party per capita, and turnout per capita. The demographic controls include log of population density, log of median income, the unemployment rate, the change in unemployment between 2005-2009, the share of white population, the share of African-American population, the share of Hispanic population, the share of immigrant population, and the share of the population that is rural. More information on the variables, the data sources, and our specification are described in Section III (Data and Summary Statistics), Section IV.A (Specifications and Hypotheses), and in the Appendix. Robust standard errors in parentheses, clustered at the state level. *** 1% , ** 5% , * 10% significance.

Table A 5. Exogeneity Check at the Congressional District Level

Dependent Variable	ACU Score							
	2006		2007		2008		Δ Score 2008-2006	
	Full	All Votes	Full	All Votes	Full	All Votes	Full	All Votes
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Rainy Protest	-0.775	-0.998	1.736	1.859	-1.161	-0.893	-0.890	-0.142
	(1.124)	(1.355)	(1.121)	(1.461)	(1.094)	(1.322)	(1.192)	(1.674)
Observations	435	316	435	307	435	280	435	209
R-squared	0.961	0.965	0.962	0.951	0.951	0.973	0.826	0.923
P-value	0.494	0.465	0.128	0.210	0.294	0.600	0.485	
Election Controls	Y	Y	Y	Y	Y	Y	Y	Y
Prior Roll Call Controls	Y	Y	Y	Y	Y	Y	Y	Y
Demographic Controls	Y	Y	Y	Y	Y	Y	Y	Y
Dep. Var. Mean	53.06	54.81	42.91	40.51	41.62	38.14	-11.44	-13.09

Note: The unit of analysis is a congressional district. *Rainy Protest* is based on the precipitation amount in the district on the rally day (April 15, 2009). The dummy variable is equal to one if there was significant rain in the district (at least 0.1 inches) and zero otherwise. *Full* denotes using the full sample of all congressmen. *All votes* includes only the congressmen that voted on all scored votes. All regressions include flexible controls for the probability of rain, population, and region fixed effects. The prior roll call controls account flexibly for the past two years of ACU scores. The election controls include the identity of the victorious party, the Republican Party vote share, the total number of votes for the Republican Party, the total number of votes for the Democratic Party, and total turnout in the last two elections to the U.S. House of Representatives. The demographic controls include log of population density, log of median income, the unemployment rate, the change in unemployment between 2005-2009, the share of white population, the share of African-American population, the share of Hispanic population, the share of immigrant population, and the share of the population that is rural. More information on the variables, the data sources, and our specification are described in Section III (Data and Summary Statistics), Section IV.A (Specifications and Hypotheses), and in the Appendix. Robust standard errors in parentheses, clustered at the state level. *** 1% , ** 5% , * 10% significance.

Table A 6. The Effect of Tea Party Protests on Local Tea Party Activity, Level Outcomes and Scaled Max Attendance

Dependent Variable	Tea Party Organizers, 2010				Tea Party Protesters, 2010			
		Second-stage 2SLS estimates				Second-stage 2SLS estimates		
	Persons, '000	Persons, % of population	Persons, '000	Persons, '000	Persons, '000	Persons, % of capita	Persons, '000	Persons, '000
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Rainy Protest	-0.011***				-0.073***			
	(0.004)				(0.024)			
% of Pop. Protesting Scaling		0.0451**				0.384***		
		(0.0211)				(0.126)		
Per Protester Scaling			0.113***	0.057***			0.760***	0.385***
			(0.036)	(0.021)			(0.236)	(0.109)
Observations	2,758	2,758	2,758	2,758	2,758	2,758	2,758	2,758
R-squared	0.891	-	-	-	0.14	-	-	-
Protesters Variable	-	Max	Mean	Max	-	Max	Mean	Max
Election Controls	Y	Y	Y	Y	Y	Y	Y	Y
Demographic Controls	Y	Y	Y	Y	Y	Y	Y	Y
Dep. Var. Mean	0.057	0.058	0.057	0.057	0.069	0.070	0.069	0.069

Note: The unit of analysis is a county. *Rainy Protest* is based on the precipitation amount in the county on the rally day (April 15, 2009). The dummy variable is equal to one if there was significant rain in the county (at least 0.1 inches) and zero otherwise. We instrument for the number of protesters using *Rainy Protest* and 2SLS to derive the scaling estimates in columns 2-4 and 6-8. *% of Pop. Protesting Scaling* is based on the percent of people attending on the rally day relative the county population. *Per Protester Scaling* is based on the number of people attending the protests (scaled by 1,000) on the rally day. All regressions include flexible controls for the probability of rain, population, and region fixed effects. The election controls account for the outcomes of the U.S. House of Representatives elections in 2008. In the per-capita regressions we include the Republican Party vote share, the number of votes for the Republican Party per capita, the number of votes for the Democratic Party per capita, and turnout per capita. The level regressions include the Republican Party vote share, the total number of votes for the Republican Party, the total number of votes for the Democratic Party, and total turnout. The demographic controls include log of population density, log of median income, the unemployment rate, the change in unemployment between 2005-2009, the share of white population, the share of African-American population, the share of Hispanic population, the share of immigrant population, and the share of the population that is rural. More information on the variables, the data sources, and our specification are described in Section III (Data and Summary Statistics), Section IV.A (Specifications and Hypotheses), and in the Appendix. *Mean* denotes the average across the three sources of attendance data and *Max* is the highest reported number. Robust standard errors in parentheses, clustered at the state level. *** 1% , ** 5% , * 10% significance.

Table A 7. The Effect of Tea Party Protests on PAC Contributions, Level Outcomes and Scaled Max Attendance

Dependent Variable	PAC Contributions					
	2009	2010	2009-2010			
				Second-stage 2SLS estimates		
		$, '000		$, per capita	$, '000	
	(1)	(2)	(3)	(4)	(5)	(6)
Rainy Protest	-0.076*	-0.286**	-0.362**			
	(0.038)	(0.127)	(0.162)			
% of Pop. Protesting Scaling				0.823***		
				(0.347)		
Per Protester Scaling					3.751***	1.900**
					(1.837)	(0.891)
Observations	2,758	2,758	2,758	2,758	2,758	2,758
R-squared	0.69	0.72	0.74	-	-	-
Protesters Variable	-	-	-	Max	Mean	Max
Election Controls	Y	Y	Y	Y	Y	Y
Demographic Controls	Y	Y	Y	Y	Y	Y
Dep. Var. Mean	0.199	0.844	1.042	0.010	1.042	1.042

Note: The unit of analysis is a county. *Rainy Protest* is based on the precipitation amount in the county on the rally day (April 15, 2009). The dummy variable is equal to one if there was significant rain in the county (at least 0.1 inches) and zero otherwise. We instrument for the number of protesters using *Rainy Protest* and 2SLS to derive the scaling estimates in columns 4-6. *% of Pop. Protesting Scaling* is based on the percent of people attending on the rally day relative the county population. *Per Protester Scaling* is based on the number of people attending the protests (scaled by 1,000) on the rally day. All regressions include flexible controls for the probability of rain, population, and region fixed effects. The election controls account for the outcomes of the U.S. House of Representatives elections in 2008. In the per-capita regressions we include the Republican Party vote share, the number of votes for the Republican Party per capita, the number of votes for the Democratic Party per capita, and turnout per capita. The level regressions include the Republican Party vote share, the total number of votes for the Republican Party, the total number of votes for the Democratic Party, and total turnout. The demographic controls include log of population density, log of median income, the unemployment rate, the change in unemployment between 2005-2009, the share of white population, the share of African-American population, the share of Hispanic population, the share of immigrant population, and the share of the population that is rural. More information on the variables, the data sources, and our specification are described in Section III (Data and Summary Statistics), Section IV.A (Specifications and Hypotheses), and in the Appendix. *Mean* denotes the average across the three sources of attendance data and *Max* is the highest reported number. Robust standard errors in parentheses, clustered at the state level. *** 1% , ** 5% , * 10% significance.

Table A 8. The Effect of Tea Party Protests on Voting Behavior, 2010 U.S. House, Level Outcomes and Additional Scaling Estimates

Dependent Variable	Republican Party Votes				Democratic Party Votes				Republican Party Vote Share
		Second-stage 2SLS estimates				Second-stage 2SLS estimates			
	Votes, '000	Votes, % of population	Votes, '000		Votes, '000	Votes, % of population	Votes, '000		Votes, % of population
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Rainy Protest	-1.37**				-0.47				
	(0.51)				(0.52)				
% of Pop. Protesting Scaling		6.10***				0.84			9.11**
		(2.22)				(1.99)			(4.44)
Per Protester Scaling			14.20***	7.19***			4.83	2.45	
			(4.77)	(2.56)			(5.31)	(2.58)	
Observations	2,758	2,758	2,758	2,758	2,758	2,758	2,758	2,758	2,758
R-squared	0.97	-	-	-	0.99	-	-	-	-
Protesters Variable	-	Max	Mean	Max	-	Max	Mean	Max	Max
Election Controls	Y	Y	Y	Y	Y	Y	Y	Y	Y
Demographic Controls	Y	Y	Y	Y	Y	Y	Y	Y	Y
Dep. Var. Mean	14.88	14.97	14.88	14.88	12.68	12.76	12.68	12.68	52.47

Note: The unit of analysis is a county. *Rainy Protest* is based on the precipitation amount in the county on the rally day (April 15, 2009). The dummy variable is equal to one if there was significant rain in the county (at least 0.1 inches) and zero otherwise. We instrument for the number of protesters using *Rainy Protest* and 2SLS to derive the scaling estimates in columns 2-4 and 6-9. *% of Pop. Protesting Scaling* is based on the percent of people attending on the rally day relative the county population. *Per Protester Scaling* is based on the number of people attending the protests (scaled by 1,000) on the rally day. All regressions include flexible controls for the probability of rain, population, and region fixed effects. The election controls account for the outcomes of the U.S. House of Representatives elections in 2008. In the per-capita regressions we include the Republican Party vote share, the number of votes for the Republican Party per capita, the number of votes for the Democratic Party per capita, and turnout per capita. The level regressions include the Republican Party vote share, the total number of votes for the Republican Party, the total number of votes for the Democratic Party, and total turnout. In addition, the congressional-district specification in column 16 also includes prior roll call controls to account flexibly for the past two years of ACU scores and election controls of the identity of the victorious party of the past two elections. The demographic controls include log of population density, log of median income, the unemployment rate, the change in unemployment between 2005-2009, the share of white population, the share of African-American population, the share of Hispanic population, the share of immigrant population, and the share of the population that is rural. More information on the variables, the data sources, and our specification are described in Section III (Data and Summary Statistics), Section IV.A (Specifications and Hypotheses), and in the Appendix. *Mean* denotes the average across the three sources of attendance data and *Max* is the highest reported number. Robust standard errors in parentheses, clustered at the state level. *** 1% , ** 5% , * 10% significance.

Table A 9. a. The Reduced-Form Effect of Rain, Robustness to the Set of Control Variables Used

Dependent Variable	Tea Party Protesters, 2009				Tea Party Organizers, 2010		Tea Party Protesters 2010		PAC Contributions 2009-10		Republican Votes U.S. House 2010			
	Persons, '000 mean	% of population mean	Persons, '000, max	% of population max	$ '000	$, per capita	Persons '000	% of population	Persons, '000	% of population	Votes '000	% of population	County % of votes	District % of votes
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
Panel A: No Demographic Controls														
Rainy Protest	-0.087***	-0.076***	-0.178***	-0.160***	-0.010***	-0.0060**	-0.070***	-0.065**	-0.378**	-0.0017***	-1.34**	-0.89**	-1.28	-1.85**
	(0.023)	(0.020)	(0.049)	(0.044)	(0.004)	(0.0029)	(0.024)	(0.025)	(0.173)	(0.0006)	(0.51)	(0.36)	(0.82)	(0.73)
Election Controls	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Demographic Controls	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Region FE	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Panel B: No Region Fixed Effects														
Rainy Protest	-0.110***	-0.092***	-0.221***	-0.189***	-0.008**	-0.0064**	-0.075***	-0.063**	-0.288*	-0.0013**	-0.99**	-0.98***	-1.36*	-1.86***
	(0.027)	(0.023)	(0.053)	(0.048)	(0.003)	(0.0029)	(0.024)	(0.026)	(0.143)	(0.0006)	(0.42)	(0.28)	(0.71)	(0.69)
Election Controls	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Demographic Controls	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Region FE	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Panel C: Flexible Election Controls														
Rainy Protest	-0.121***	-0.075**	-0.238***	-0.152**	-0.020***	-0.0068***	-0.086***	-0.046**	-0.765**	-0.0014***	-3.51**	-1.08***	-2.36**	-1.76*
	(0.031)	(0.029)	(0.061)	(0.059)	(0.007)	(0.0021)	(0.027)	(0.023)	(0.315)	(0.0004)	(1.38)	(0.27)	(0.98)	(0.97)
Election Controls	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Demographic Controls	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Region FE	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Observations	2,758	2,758	2,758	2,758	2,758	2,758	2,758	2,758	2,758	2,758	2,758	2,758	2,758	435
Rain Variable	Dummy	Dummy	Dummy	Dummy	Dummy	Dummy	Dummy	Dummy	Dummy	Dummy	Dummy	Dummy	Dummy	Dummy
Dep. Var. Mean	0.160	0.161	0.293	0.295	0.057	0.058	0.069	0.070	1.043	0.010	14.88	14.97	52.47	50.86

Note: The unit of analysis is a county except for column 14 where we analyze the congressional district. *Rainy Protest* is based on the precipitation amount in the county (or district) on the rally day (April 15, 2009). The dummy variable is equal to one if there was significant rain in the county (or district) (at least 0.1 inches) and zero otherwise. All regressions include flexible controls for the probability of rain and population. The election controls account for the outcomes of the U.S. House of Representatives elections in 2008. In the level regressions we include the Republican Party vote share, the total number of votes for the Republican Party, the total number of votes for the Democratic Party, and total turnout. The per-capita regressions include the Republican Party vote share, the number of votes for the Republican Party per capita, the number of votes for the Democratic Party per capita, and turnout per capita. In addition, the congressional district specification in column 14 also includes prior roll call controls to account flexibly for the past two years of ACU scores and election controls of the identity of the victorious party of the past two elections. The demographic controls include log of population density, log of median income, the unemployment rate, the change in unemployment between 2005-2009, the share of white population, the share of African-American population, the share of Hispanic population, the share of immigrant population, and the share of the population that is rural. In Panel C, the election controls and demographic controls consist of 9 dummy variables based on their respective distribution, one for each decile, equal to 1 if the probability in a county (or district) falls within the given range and 0 otherwise. More information on the variables, the data sources, and our specification are described in Section III (Data and Summary Statistics), Section IV.A (Specifications and Hypotheses), and in the Appendix. *Mean* denotes the average turnout across the three sources of attendance data. *Max* is the highest reported turnout in any given location. Robust standard errors in parentheses, clustered at the state level. *** 1% , ** 5% , * 10% significance.

Table A 9. b. The Reduced-Form Effect of Rain, Robustness to the Set of Control Variables Used

Dependent Variable	ACU Score				Retirement		Average Effect
	2009		2010				
	Full	All Votes	Full	All Votes	Republicans	Democrats	Political Beliefs
	(1)	(2)	(3)	(4)	(5)	(6)	
Panel A: No Demographic Controls							
Rainy Protest	-1.455	-2.613***	-3.740***	-2.210*	0.055	-0.081**	-0.139***
	(0.893)	(0.952)	(1.116)	(1.235)	(0.055)	(0.032)	(0.035)
Election Controls	Y	Y	Y	Y	Y	Y	Y
Demographic Controls	N	N	N	N	N	N	N
Region FE	Y	Y	Y	Y	Y	Y	Y
Panel B: No Region Fixed Effects							
Rainy Protest	-2.070**	-3.019***	-4.024***	-3.386**	0.020	-0.083**	-0.107**
	(0.980)	(1.074)	(1.174)	(1.373)	(0.056)	(0.031)	(0.043)
Election Controls	Y	Y	Y	Y	Y	Y	Y
Demographic Controls	Y	Y	Y	Y	Y	Y	Y
Region FE	N	N	N	N	N	N	N
Panel C: Flexible Election Controls							
Rainy Protest	-1.949**	-2.923**	-4.312***	-3.080*	0.205	-0.138**	-0.228**
	(0.958)	(1.220)	(1.535)	(1.827)	(0.252)	(0.065)	(0.05)
Election Controls	Y	Y	Y	Y	Y	Y	Y
Demographic Controls	Y	Y	Y	Y	Y	Y	Y
Region FE	Y	Y	Y	Y	Y	Y	Y
Observations	435	327	435	279	179	256	-
Dep. Var. Mean	41.14	41.44	41.45	39.17	0.0447	0.0469	-

Note: The unit of analysis is a congressional district. *Rainy Protest* is based on the precipitation amount in the county on the rally day (April 15, 2009). The dummy variable is equal to one if there was significant rain in the county (at least 0.1 inches) and zero otherwise. *Full* denotes using the full sample of all congressmen. *All votes* includes only the congressmen that voted on all scored votes. All regressions include flexible controls for the probability of rain, and population. The prior roll call controls account flexibly for the past two years of ACU scores. The election controls include the identity of the victorious party, the Republican Party vote share, the total number of votes for the Republican Party, the total number of votes for the Democratic Party, and total turnout in the last two elections to the U.S. House of Representatives. The demographic controls include log of population density, log of median income, the unemployment rate, the change in unemployment between 2005-2009, the share of white population, the share of African-American population, the share of Hispanic population, the share of immigrant population, and the share of the population that is rural. In Panel C, the election controls and demographic controls consist of 9 dummy variables based on their respective distribution, one for each decile, equal to 1 if the probability in a district falls within the given range and 0 otherwise. More information on the variables, the data sources, and our specification are described in Section III (Data and Summary Statistics), Section IV.A (Specifications and Hypotheses), and in the Appendix. Robust standard errors in parentheses, clustered at the state level. *** 1% , ** 5% , * 10% significance.

Table A 10. The Reduced Form Effect of Rain, Geographic Sensitivity Analysis

Specification	Baseline	Baseline with Census Division Fixed Effects		
Sample	Full	Full	Divisions with >1% rainy obs.	Divisions with >10% rainy obs.
	(1)	(2)	(3)	(4)
Tea Party Protesters 2009	-0.0823***	-0.0896***	-0.0959***	-0.101***
	(0.0207)	(0.0267)	(0.0267)	(0.0323)
Observations	2,758	2,758	2,323	1,264
Tea Party Organizers 2010	-0.00767**	-0.00724**	-0.00699**	-0.00620**
	(0.00304)	(0.00308)	(0.00316)	(0.00285)
Observations	2,758	2,758	2,323	1,264
Tea Party Protesters 2010	-0.0653**	-0.0491	-0.0587**	-0.0565
	(0.0265)	(0.0320)	(0.0281)	(0.0386)
Observations	2,758	2,758	2,323	1,264
PAC Contributions 2009-10	-0.00140***	-0.000610	-0.000730	-0.00149**
	(0.000453)	(0.000552)	(0.000628)	(0.000584)
Observations	2,758	2,758	2,323	1,264
Strongly Supports the Tea Party, ANES Survey	-0.0570**	-0.0556**	-0.0589**	-0.0667**
	(0.0263)	(0.0274)	(0.0276)	(0.0290)
Observations	1,055	1,055	802	655
Republican Vote Share, U.S. House 2010	-1.548**	-2.028**	-2.268**	-1.875*
	(0.688)	(0.856)	(0.889)	(0.960)
Observations	2,758	2,758	2,323	1,264
ACU Score, 2010	-4.296***	-3.353***	-3.888***	-3.688**
	(1.258)	(1.208)	(1.322)	(1.463)
Observations	435	435	334	264

Note: The unit of analysis is a county except for the variables "Strongly Supports the Tea Party, ANES Survey" (unit of analysis is a survey respondent) and "ACU Score, 2010" (unit of analysis is a congressional district). Each estimate, standard error, and number of observations corresponds to a separate regression. Column 1 presents the baseline specification. Columns 2-4 add census division fixed effects, where column 3 uses the full sample, column 4 restricts the sample to divisions where at least one percent of the observations had a rainy rally, and column 5 restricts the sample to divisions with at least ten percent rainy rallies. More information on the variables, the data sources, and our specification are described in Section III (Data and Summary Statistics), Section IV.A (Specifications and Hypotheses), and in the Appendix. Robust standard errors in parentheses, clustered at the state level.*** 1% , ** 5% , * 10% significance.

Table A 11. a. The Reduced-Form Effect of Rain, Different Rainfall Measures

Dependent Variable	Tea Party Protesters 2009, First Stage				Tea Party Organizers		Tea Party Protesters 2010		PAC Contributions 2009-10		Republican Party Votes			
	Persons, '000, mean	% of population mean	Persons, '000, max	% of population max	Persons, '000	% of population	Persons, '000	% of population	$, '000	$, per capita	votes, '000	% of population	County % of votes	District % of votes
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
Panel A: Higher rainfall cutoff														
Rainy Protest, dummy	-0.126***	-0.096***	-0.255***	-0.195***	-0.013**	-0.0067*	-0.082**	-0.053*	-0.623**	-0.0016**	-1.63**	-0.94**	-1.64**	-1.297*
	(0.031)	(0.023)	(0.064)	(0.052)	(0.005)	(0.0036)	(0.032)	(0.031)	(0.242)	(0.0007)	(0.72)	(0.36)	(0.76)	(0.733)
Observations	2,758	2,758	2,758	2,758	2,758	2,758	2,758	2,758	2,758	2,758	2,758	2,758	2,758	435
Panel B: Rainfall using log of precipitation														
Rainy Protest, log(precipitation)	-0.027***	-0.019***	-0.052***	-0.038***	-0.003***	-0.0020**	-0.025***	-0.020**	-0.133**	-0.0004***	-0.46***	-0.33***	-0.51**	-0.503**
	(0.007)	(0.006)	(0.014)	(0.012)	(0.001)	(0.0009)	(0.007)	(0.007)	(0.050)	(0.0001)	(0.15)	(0.09)	(0.23)	(0.246)
Observations	2,758	2,758	2,758	2,758	2,758	2,758	2,758	2,758	2,758	2,758	2,758	2,758	2,758	435
Panel C: Rainfall within 10 mile radius														
Rainy Protest, dummy	-0.103***	-0.083***	-0.210***	-0.179***	-0.009**	-0.0071***	-0.094***	-0.080***	-0.381*	-0.0017**	-1.18*	-1.09***	-1.41*	-1.031
	(0.028)	(0.025)	(0.058)	(0.045)	(0.004)	(0.0025)	(0.029)	(0.026)	(0.192)	(0.0007)	(0.60)	(0.32)	(0.75)	(1.196)
Observations	2,286	2,286	2,286	2,286	2,286	2,286	2,286	2,286	2,286	2,286	2,286	2,286	2,286	330
Election Controls	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Demographic Controls	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Dep. Var. Mean	0.160	0.161	0.293	0.295	0.057	0.058	0.069	0.070	1.043	0.010	14.88	14.97	52.47	50.86

Note: The unit of analysis is a county, except in column 14. In Panel A, *Rainy Protest* is based on the precipitation amount in the county on the rally day (April 15, 2009). The dummy variable is equal to one if there was significant rain in the county (at least 0.35 inches) and zero otherwise. In Panel B, *Rainy Protest* is log(precipitation+1), where precipitation is rainfall in one-hundredths of a an inch in the county on the rally day (April 15, 2009). In Panel C, *Rainy Protest* is based on the average precipitation amount of all rain stations within a 10 mile radius of the county centroid. The dummy variable is equal to one if there was significant rain in the county (at least 0.10 inches) and zero otherwise. All regressions include flexible controls for the probability of rain, population, and region fixed effects. The election controls account for the outcomes of the U.S. House of Representatives elections in 2008. In the level regressions we include the Republican Party vote share, the total number of votes for the Republican Party, the total number of votes for the Democratic Party, and total turnout. The per-capita regressions include the Republican Party vote share, the number of votes for the Republican Party per capita, the number of votes for the Democratic Party per capita, and turnout per capita. In addition, the congressional district specification in column 14 also includes prior roll call controls to account flexibly for the past two years of ACU scores and election controls of the identity of the victorious party of the past two elections. The demographic controls include log of population density, log of median income, the unemployment rate, the change in unemployment between 2005-2009, the share of white population, the share of African-American population, the share of Hispanic population, the share of immigrant population, and the share of the population that is rural. More information on the variables, the data sources, and our specification are described in Section III (Data and Summary Statistics), Section IV.A (Specifications and Hypotheses), and in the Appendix. Robust standard errors in parentheses, clustered at the state level. *** 1% , ** 5% , * 10% significance.

Table A 11. b. The Reduced-Form Effect of Rain, Different Rainfall Measures

Dependent Variable	ACU Score				Retirement		Average Effect
	2009		2010				
	Full	All Votes	Full	All Votes	Republicans	Democrats	Political Beliefs
	(1)	(2)	(3)	(4)	(5)	(6)	
Panel A: Higher rainfall cutoff							
Rainy Protest, dummy	-1.989*	-2.329*	-4.388***	-2.773*	-0.028	-0.090***	-0.13***
	(1.044)	(1.374)	(1.386)	(1.493)	(0.077)	(0.029)	(0.038)
Panel B: Rainfall using precipitation amount							
Rainy Protest, log(precipitation)	-0.545*	-0.823***	-0.978***	-0.721**	0.004	-0.030**	-0.031***
	(0.278)	(0.292)	(0.359)	(0.353)	(0.014)	(0.012)	(0.012)
Panel C: Rainfall within county radius							
Rainy Protest, dummy	-1.517	-2.180*	-3.099**	-1.894	-0.030	-0.122***	-0.01
	(0.948)	(1.099)	(1.428)	(1.790)	(0.104)	(0.044)	(0.046)
Election Controls	Y	Y	Y	Y	Y	Y	Y
Demographic Controls	Y	Y	Y	Y	Y	Y	Y
Dep. Var. Mean	41.14	41.44	41.45	39.17	0.0447	0.0469	-

Note: The unit of analysis is a congressional district. *Full* denotes using the full sample of all congressmen. *All votes* includes only the congressmen that voted on all scored votes. In Panel A, *Rainy Protest* is based on the precipitation amount in the district on the rally day (April 15, 2009). The dummy variable is equal to one if there was significant rain in the district (at least 0.35 inches) and zero otherwise. In Panel B, *Rainy Protest* is log(precipitation+1), where precipitation is rainfall in one-hundredths of a an inch in the county on the rally day (April 15, 2009). In Panel C, *Rainy Protest* is based on the average precipitation amount of all rain stations within a 10 mile radius of the district centroid. The dummy variable is equal to one if there was significant rain in the district (at least 0.10 inches) and zero otherwise. All regressions include flexible controls for the probability of rain, population, and region fixed effects. The prior roll call controls account flexibly for the past two years of ACU scores. The election controls include the identity of the victorious party, the Republican Party vote share, the total number of votes for the Republican Party, the total number of votes for the Democratic Party, and total turnout in the last two elections to the U.S. House of Representatives. The demographic controls include log of population density, log of median income, the unemployment rate, the change in unemployment between 2005-2009, the share of white population, the share of African-American population, the share of Hispanic population, the share of immigrant population, and the share of the population that is rural. More information on the variables, the data sources, and our specification are described in Section III (Data and Summary Statistics), Section IV.A (Specifications and Hypotheses), and in the Appendix. Robust standard errors in parentheses, clustered at the state level. *** 1% , ** 5% , * 10% significance.

Table A 12. Nearest-Neighbor Matching Estimator

Dependent Variable	Tea Party Protesters 2009, First Stage				Tea Party Organizers		Tea Party Protesters 2010		PAC Contributions 2009-10		Republican Party Votes		
	Persons, '000 mean	% of population mean	Persons, '000 max	% of population max	Persons, '000	% of population	Persons, '000	% of population	$, '000	$, per capita	votes, '000	% of population	% of vote
	(1)			(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Rainy Protest	-0.093***	-0.073***	-0.191***	-0.137***	-0.018***	-0.011***	-0.043*	-0.031**	-0.466***	-0.006***	-2.949***	-1.253***	-2.158***
	(0.022)	(0.019)	(0.036)	(0.03)	(0.004)	(0.001)	(0.024)	(0.013)	(0.147)	(0.001)	(0.895)	(0.161)	(0.554)
Observations	2,758	2,758	2,758	2,758	2,758	2,758	2,758	2,758	2,758	2,758	2,758	2,758	2,758
Protesters Variable	mean	mean	max	max	mean	mean	mean	mean	mean	mean	mean	mean	mean
Rain Variable	dummy	dummy	dummy	dummy	dummy	dummy	dummy	dummy	dummy	dummy	dummy	dummy	dummy
Sample	full	full	full	full	full	full	full	full	full	full	full	full	full
Election Controls	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Demographic Controls	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Dep. Var. Mean	0.160	0.161	0.293	0.295	0.057	0.058	0.069	0.070	1.043	0.010	14.88	14.97	52.47

Note: The unit of analysis is a county. *Rainy Protest* is based on the precipitation amount in the county on the rally day (April 15, 2009). The dummy variable is equal to one if there was significant rain in the county (at least 0.1 inches) and zero otherwise. The specifications report the estimates of the average treatment effects for the nearest-neighbor matching estimator, based on matching on the probability of rain, population, region fixed effects, election controls, and demographic controls. The election controls account for the outcomes of the U.S. House of Representatives elections in 2008. In the level regressions we include the Republican Party vote share, the total number of votes for the Republican Party, the total number of votes for the Democratic Party, and total turnout. The per-capita regressions include the Republican Party vote share, the number of votes for the Republican Party per capita, the number of votes for the Democratic Party per capita, and turnout per capita. The demographic controls include log of population density, log of median income, the unemployment rate, the change in unemployment between 2005-2009, the share of white population, the share of African-American population, the share of Hispanic population, the share of immigrant population, and the share of the population that is rural. All controls except the region fixed effects consist of nine dummy variables based on their respective distribution, one for each decile, equal to 1 if the probability in a county falls within the given range and 0 otherwise. More information on the variables, the data sources, and our specification are described in Section III (Data and Summary Statistics), Section IV.A (Specifications and Hypotheses), and in the Appendix. The estimates average the treatment for the closest four matches and are bias-corrected (Abadie et al., 2004). *Mean* denotes the average across the three sources of attendance data. *Max* is the highest reported turnout in any given location. Robust standard errors in parentheses, with *** 1% , ** 5% , * 10% significance.

Table A 13. The Reduced Form Effect of Rain, Dropping Small and Large Counties

Dependent Variable	Tea Party Protesters 2009				Tea Party Organizers, 2010		Tea Party Protesters, 2010		PAC Contributions 2009-10		Republican Votes, U.S. House 2010		
	Persons, '000, mean	% of pop pop. mean	Persons, '000, max	% of population max	Persons, '000	% of population	Persons, '000	% of population	$, '000	$, per capita	Votes, '000	% of population	% of votes
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Rainy Protest	-0.097***	-0.074***	-0.196***	-0.152***	-0.009**	-0.0062**	-0.051*	-0.050**	-0.175*	-0.0012	-1.30***	-1.24***	-1.80**
	(0.024)	(0.019)	(0.053)	(0.040)	(0.003)	(0.0030)	(0.029)	(0.024)	(0.101)	(0.0007)	(0.46)	(0.28)	(0.77)
Observations	2,467	2,467	2,467	2,467	2,467	2,467	2,467	2,467	2,467	2,467	2,467	2,467	2,467
R-squared	0.33	0.33	0.15	0.14	0.85	0.32	0.12	0.06	0.48	0.13	0.97	0.84	0.87
Election Controls	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Demographic Controls	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Dep. Var. Mean	0.160	0.161	0.293	0.295	0.057	0.058	0.069	0.070	1.043	0.010	14.88	14.97	52.47

Note: The unit of analysis is a county, where counties with a population size below ten thousands and above one million are excluded. *Rainy Protest* is based on the precipitation amount in the county on the rally day (April 15, 2009). The dummy variable is equal to one if there was significant rain in the county (at least 0.1 inches) and zero otherwise. All regressions include flexible controls for the probability of rain, population, and region fixed effects. The election controls account for the outcomes of the U.S. House of Representatives elections in 2008. In the level regressions we include the Republican Party vote share, the total number of votes for the Republican Party, the total number of votes for the Democratic Party, and total turnout. The per-capita regressions include the Republican Party vote share, the number of votes for the Republican Party per capita, the number of votes for the Democratic Party per capita, and turnout per capita. The demographic controls include log of population density, log of median income, the unemployment rate, the change in unemployment between 2005-2009, the share of white population, the share of African-American population, the share of Hispanic population, the share of immigrant population, and the share of the population that is rural. More information on the variables, the data sources, and our specification are described in Section III (Data and Summary Statistics), Section IV.A (Specifications and Hypotheses), and in the Appendix. *Mean* denotes the average across the three sources of attendance data. *Max* is the highest reported turnout in any given location. Robust standard errors in parentheses, clustered at the state level. *** 1% , ** 5% , * 10% significance.

Table A 14. The Reduced Form Effect of Rain, Conditional on Having a Rally

Dependent Variable	Tea Party Protesters 2009				Tea Party Organizers, 2010		Tea Party Protesters, 2010		PAC Contributions 2009-10		Republican Votes, U.S. House 2010		
	Persons, '000, mean	% of pop pop. mean	Persons, '000, max	% of population max	Persons, '000	% of population	Persons, '000	% of population	$, '000	$, per capita	Votes, '000	% of population	% of votes
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Rainy Protest	-0.228**	-0.108***	-0.518***	-0.236***	-0.025**	-0.0070**	-0.180**	-0.076*	-1.533***	-0.0020***	-3.38**	-0.97***	-1.46*
	(0.096)	(0.034)	(0.187)	(0.077)	(0.010)	(0.0027)	(0.087)	(0.043)	(0.432)	(0.0007)	(1.36)	(0.33)	(0.85)
Observations	545	545	545	545	545	545	545	545	545	545	545	545	542
R-squared	0.40	0.40	0.22	0.23	0.91	0.55	0.17	0.14	0.77	0.42	0.97	0.89	0.91
Election Controls	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Demographic Controls	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Dep. Var. Mean	0.815	0.240	1.492	0.440	0.187	0.055	0.322	0.095	4.052	0.012	46.66	13.76	57.71

Note: The unit of analysis is a county, restricted to counties that had a reported rally according to at least one source. *Rainy Protest* is based on the precipitation amount in the county on the rally day (April 15, 2009). The dummy variable is equal to one if there was significant rain in the county (at least 0.1 inches) and zero otherwise. All regressions include flexible controls for the probability of rain, population, and region fixed effects. The election controls account for the outcomes of the U.S. House of Representatives elections in 2008. In the level regressions we include the Republican Party vote share, the total number of votes for the Republican Party, the total number of votes for the Democratic Party, and total turnout. The per-capita regressions include the Republican Party vote share, the number of votes for the Republican Party per capita, the number of votes for the Democratic Party per capita, and turnout per capita. The demographic controls include log of population density, log of median income, the unemployment rate, the change in unemployment between 2005-2009, the share of white population, the share of African-American population, the share of Hispanic population, the share of immigrant population, and the share of the population that is rural. More information on the variables, the data sources, and our specification are described in Section III (Data and Summary Statistics), Section IV.A (Specifications and Hypotheses), and in the Appendix. *Mean* denotes the average across the three sources of attendance data. *Max* is the highest reported turnout in any given location. Robust standard errors in parentheses, clustered at the state level. *** 1% , ** 5% , * 10% significance.

Table A 15. Standard Errors with Spatial Dependence

Dependent Variable	Tea party Protesters, '000				PAC Contributions 2009-10, $ '000	PAC Contributions 2010, $ '000	Tea Party Organizers 2010 '000	Tea Party Protesters 2010, '000	Republican Votes U.S. House 2010, '000	Democratic Votes, U.S. House 2010, '000	ACU 2009 Score	ACU 2010 Score	ACU 2010-2008 Score
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Rainy Protest	-0.094	-0.185	-0.160	-0.226	-0.355	-0.279	-0.011	-0.072	-1.22	-0.42	-1.922	-4.296	-3.371
State-clustered standard errors	[0.022]***	[0.051]***	[0.054]***	[0.095]**	[0.161]**	[0.126]**	[0.004]***	[0.024]***	[0.51]**	[0.52]	[0.937]**	[1.021]***	[1.307]***
Spatial dependence <5 degrees	(0.028)***	(0.054)***	(0.056)***	(0.101)**	(0.170)**	(0.135)**	(0.003)***	(0.025)***	(0.48)**	(0.47)	(0.767)**	(1.140)***	(1.122)***
Spatial dependence <10 degrees	(0.024)***	(0.050)***	(0.051)***	(0.083)***	(0.171)**	(0.139)**	(0.003)***	(0.023)***	(0.49)**	(0.49)	(0.580)***	(0.794)***	(0.881)***
Spatial dependence <15 degrees	(0.024)***	(0.051)***	(0.047)***	(0.074)***	(0.159)**	(0.129)**	(0.002)***	(0.023)***	(0.46)***	(0.51)	(0.542)***	(0.700)***	(0.803)***
Spatial dependence <20 degrees	(0.024)***	(0.048)***	(0.046)***	(0.069)***	(0.151)**	(0.123)**	(0.002)***	(0.023)***	(0.43)***	(0.53)	(0.476)***	(0.608)***	(0.764)***
Observations	2,758	2,758	2,758	2,758	2,758	2,758	2,758	2,758	2,758	2,758	435	435	435
Unit of Analysis	County	County	County	County	County	County	County	County	County	County	District	District	District
Rain Variable	Dummy	Dummy	Continuous	Dummy	Dummy	Dummy	Dummy	Dummy	Dummy	Dummy	Dummy	Dummy	Dummy
Protesters Variable	Mean	Max	Mean	Mean	-	-	-	-	-	-	-	-	-
Election Controls	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Demographic Controls	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

Note: The unit of analysis is a county except for columns 11-13 where we analyze the congressional district. *Rainy Protest* is based on the precipitation amount in the county (or district) on the rally day (April 15, 2009). The dummy variable is equal to one if there was significant rain in the county (or district) (at least 0.1 inches) and zero otherwise. All regressions include flexible controls for the probability of rain, population, and region fixed effects. The election controls account for the outcomes of the U.S. House of Representatives elections in 2008. In the level regressions we include the Republican Party vote share, the total number of votes for the Republican Party, the total number of votes for the Democratic Party, and total turnout. The per-capita regressions include the Republican Party vote share, the number of votes for the Republican Party per capita, the number of votes for the Democratic Party per capita, and turnout per capita. The demographic controls include log of population density, log of median income, the unemployment rate, the change in unemployment between 2005-2009, the share of white population, the share of African-American population, the share of Hispanic population, the share of immigrant population, and the share of the population that is rural. More information on the variables, the data sources, and our specification are described in Section III (Data and Summary Statistics), Section IV.A (Specifications and Hypotheses), and in the Appendix. *Mean* denotes the average across the three sources of attendance data. *Max* is the highest reported turnout in any given location. Standard errors in square brackets are clustered at the state level. Standard errors in parentheses are adjusted for spatial correlation using Conley (1999). Asymptotic covariance matrices for moment conditions are estimated as weighted averages of sample autocovariances. The weight for each term is the product of weight functions in each spatial dimension (latitude and longitude) that decline linearly and are zero beyond a cutoff distance. Standard errors with four different cutoffs are presented: 5, 10, 15 and 20 degrees, respectively.

Table A 16. Complier Counties

	Protesters, % of population		Protesters, '000	
	(1)	(2)	(3)	(4)
Rainy Protest, Republican Leaning County	-0.119**	-0.062**	-0.124***	-0.069***
	(0.048)	(0.025)	(0.044)	(0.022)
Rainy Protest, Swing County	-0.183***	-0.081***	-0.320***	-0.156***
	(0.062)	(0.026)	(0.087)	(0.043)
Rainy Protest, Democratic Leaning County	-0.246***	-0.120***	-0.322**	-0.141
	(0.064)	(0.043)	(0.155)	(0.095)
Observations	2,758	2,758	2,758	2,758
R-squared	0.141	0.157	0.411	0.406
Protesters Variable	Max	Mean	Max	Mean
Demographic Controls	Y	Y	Y	Y
Election Controls	Y	Y	Y	Y
Dep. Var. Mean	0.295	0.161	0.293	0.160

Note: The unit of analysis is a county. A *Republican leaning county* is a dummy variable indicating a predicted 2010 Republican vote share in the U.S. House above 0.55, a *Swing County* has a predicted Republican vote share between 0.45-0.55, and a *Democratic leaning county* below 0.45. The predicted vote share is the linear prediction from a regression of 2010 Republican vote share on all regressors of equation 1 (i.e., previous election controls, demographics, region fixed effects, and the rain probability), except that it excludes the *Rainy Protest* dummy. Each estimate is for the coefficient of the interaction with *Rainy Protest*. *Rainy Protest* is based on the precipitation amount in the county on the rally day (April 15, 2009). The dummy variable is equal to one if there was significant rain in the county (at least 0.1 inches) and zero otherwise. All regressions include flexible controls for the probability of rain, population, and region fixed effects. The election controls account for the outcomes of the U.S. House of Representatives elections in 2008. In the per-capita regressions we include the Republican Party vote share, the number of votes for the Republican Party per capita, the number of votes for the Democratic Party per capita, and turnout per capita. The level regressions include the Republican Party vote share, the total number of votes for the Republican Party, the total number of votes for the Democratic Party, and total turnout. The demographic controls include log of population density, log of median income, the unemployment rate, the change in unemployment between 2005-2009, the share of white population, the share of African-American population, the share of Hispanic population, the share of immigrant population, and the share of the population that is rural. More information on the variables, the data sources, and our specification are described in Section III (Data and Summary Statistics), Section IV.A (Specifications and Hypotheses), and in the Appendix. *Max* denotes the highest reported turnout in any given location. *Mean* is the average across the three sources of attendance data. Robust standard errors in parentheses, clustered at the state level.*** 1% , ** 5% , * 10% significance.

Table A 17. The Effect of Tea Party Protests on Voting Behavior, OLS and Second-Stage 2SLS Estimates

Dependent Variable	Tea Party Organizers, 2010			Tea Party Protesters, 2010			PAC Contributions 2009-10			Republican Votes, U.S. House 2010					
	% of population			% of population			$ per capita			% of population			% of votes		
	OLS	OLS	2SLS	OLS	OLS	2SLS	OLS	OLS	2SLS	OLS	OLS	2SLS	OLS	OLS	2SLS
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Protesters, % of Pop.	0.013***	0.012***		0.286***	0.285***		0.220*	0.209*		0.769*	0.446**		1.531	0.695	
	(0.003)	(0.003)		(0.053)	(0.052)		(0.112)	(0.114)		(0.383)	(0.192)		(1.342)	(0.641)	
% of Pop. Protesting Scaling			0.093**			0.794***			1.700**			12.594***			18.808**
			(0.038)			(0.277)			(0.698)			(4.209)			(7.847)
Protesters Variable	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean
Demographic Controls	N	Y	Y	N	Y	Y	N	Y	Y	N	Y	Y	N	Y	Y
Election Controls	N	Y	Y	N	Y	Y	N	Y	Y	N	Y	Y	N	Y	Y
Observations	2,758	2,758	2,758	2,758	2,758	2,758	2,758	2,758	2,758	2,758	2,758	2,758	2,758	2,758	2,758
R-squared	0.033	0.036	-	0.095	0.107	-	0.216	0.232	-	0.680	0.871	-	0.508	0.889	-
Dep. Var. Mean	0.058	0.058	0.058	0.070	0.070	0.070	0.010	0.010	0.010	14.97	14.97	14.97	52.47	52.47	52.47

Note: The unit of analysis is a county. *Rainy Protest* is based on the precipitation amount in the county on the rally day (April 15, 2009). The dummy variable is equal to one if there was significant rain in the county (at least 0.1 inches) and zero otherwise. We instrument for the number of protesters using *Rainy Protest* and 2SLS to derive the scaling estimates in columns 3, 6, 9, 12, and 15. *% of Pop. Protesting Scaling* is based on the percent of people attending on the rally day relative the county population. All regressions include flexible controls for the probability of rain, population, and region fixed effects. In the per-capita regressions we include the Republican Party vote share, the number of votes for the Republican Party per capita, the number of votes for the Democratic Party per capita, and turnout per capita. The level regressions include the Republican Party vote share, the total number of votes for the Republican Party, the total number of votes for the Democratic Party, and total turnout. The election controls account for the outcomes of the U.S. House of Representatives elections in 2008. The demographic controls include log of population density, log of median income, the unemployment rate, the change in unemployment between 2005-2009, the share of white population, the share of African-American population, the share of Hispanic population, the share of immigrant population, and the share of the population that is rural. More information on the variables, the data sources, and our specification are described in Section III (Data and Summary Statistics), Section IV.A (Specifications and Hypotheses), and in the Appendix. Robust standard errors in parentheses, clustered at the state level. *** 1% , ** 5% , * 10% significance.

Table A 18. The Effect of Tea Party Protests on Voting Behavior, Unweighted Regressions

Dependent Variable	Protesters, % of population		Republican Party Votes % of population			Democratic Party Votes % of population			Republican Vote share % of all votes		
				Second-stage 2SLS estimates			Second-stage 2SLS estimates			Second-stage 2SLS estimates	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Rainy Protest	-0.069***	-0.030***	-0.71***			-0.03			-1.31**		
	(0.021)	(0.010)	(0.26)			(0.30)			(0.59)		
% of Pop. Protesting Scaling				10.40***			0.50			19.15**	
				(3.78)			(4.31)			(7.72)	
Per Protester Scaling					24.10***			1.15			44.37**
					(8.71)			(9.95)			(19.27)
Observations	2,758	2,758	2,758	2,758	2,758	2,758	2,758	2,758	2,758	2,758	2,758
R-squared	0.061	0.073	0.83	-	-	0.81	-	-	0.83	-	-
Protesters Variable	Max	Mean	-	Max	Mean	-	Max	Mean	-	Max	Mean
Election Controls	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Demographic Controls	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Dep. Var. Mean	0.153	0.073	19.6	19.6	19.6	11.5	11.5	11.5	61.2	61.2	61.2

Note: The unit of analysis is a county. *RainyProtest* is based on the precipitation amount in the county (or district) on the rally day (April 15, 2009). The dummy variable is equal to one if there was significant rain in the county (at least 0.1 inches) and zero otherwise. We instrument for the number of protesters using *Rainy Protest* and 2SLS to derive the scaling estimates in columns 4-5, 7-8, and 10-11. *% of Pop. Protesting Scaling* is based on the percent of people attending on the rally day relative the county population. *Per Protester Scaling* is based on the number of people attending the protests (scaled by 1,000) on the rally day. All regressions include flexible controls for the probability of rain, population, and region fixed effects. The election controls account for the outcomes of the U.S. House of Representatives elections in 2008. In the per-capita regressions we include the Republican Party vote share, the number of votes for the Republican Party per capita, the number of votes for the Democratic Party per capita, and turnout per capita. The level regressions include the Republican Party vote share, the total number of votes for the Republican Party, the total number of votes for the Democratic Party, and total turnout. The demographic controls include log of population density, log of median income, the unemployment rate, the change in unemployment between 2005-2009, the share of white population, the share of African-American population, the share of Hispanic population, the share of immigrant population, and the share of the population that is rural. More information on the variables, the data sources, and our specification are described in Section III (Data and Summary Statistics), Section IV.A (Specifications and Hypotheses), and in the Appendix. *Max* denotes the highest reported turnout in any given location. *Mean* is the average across the three sources of attendance data. Robust standard errors in parentheses, clustered at the state level. *** 1% , ** 5% , * 10% significance.

II. Appendix Figures

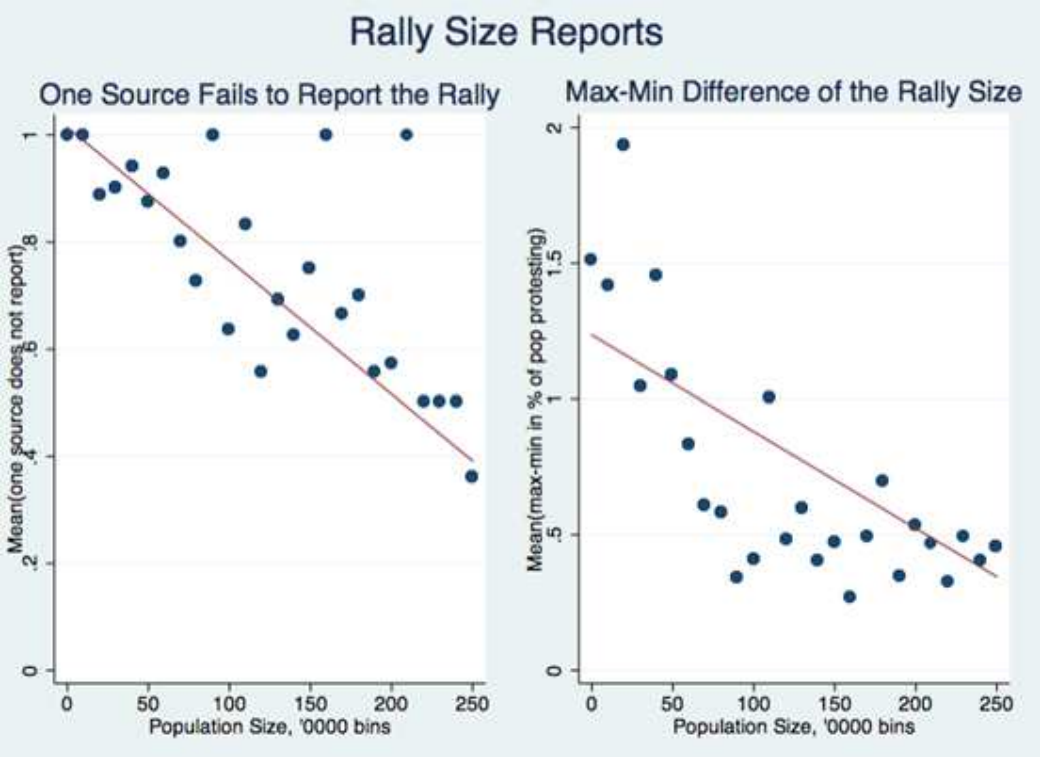

Figure A.1. County Population Size and Measurement Error in Rally Size. This figure shows that measurement error decreases in population size. The x-axis is the county population size in bins of 10,000, where the highest bin includes all counties with a population of 250,000 and above. The graph on the left plots the share of counties within each population bin for which two of three sources report of a rally, but one source fails to do so. The graph on the right plots the mean difference between the highest and lowest rally size for each county with at least one source reporting a rally. The lowest rally size includes sources not reporting a rally, which implies a reported rally size of zero for that source. A value of 1 on the y-axis means that the max-min difference is 1% of the population reported protesting. The figure shows that rally size reports are more precise for larger counties.

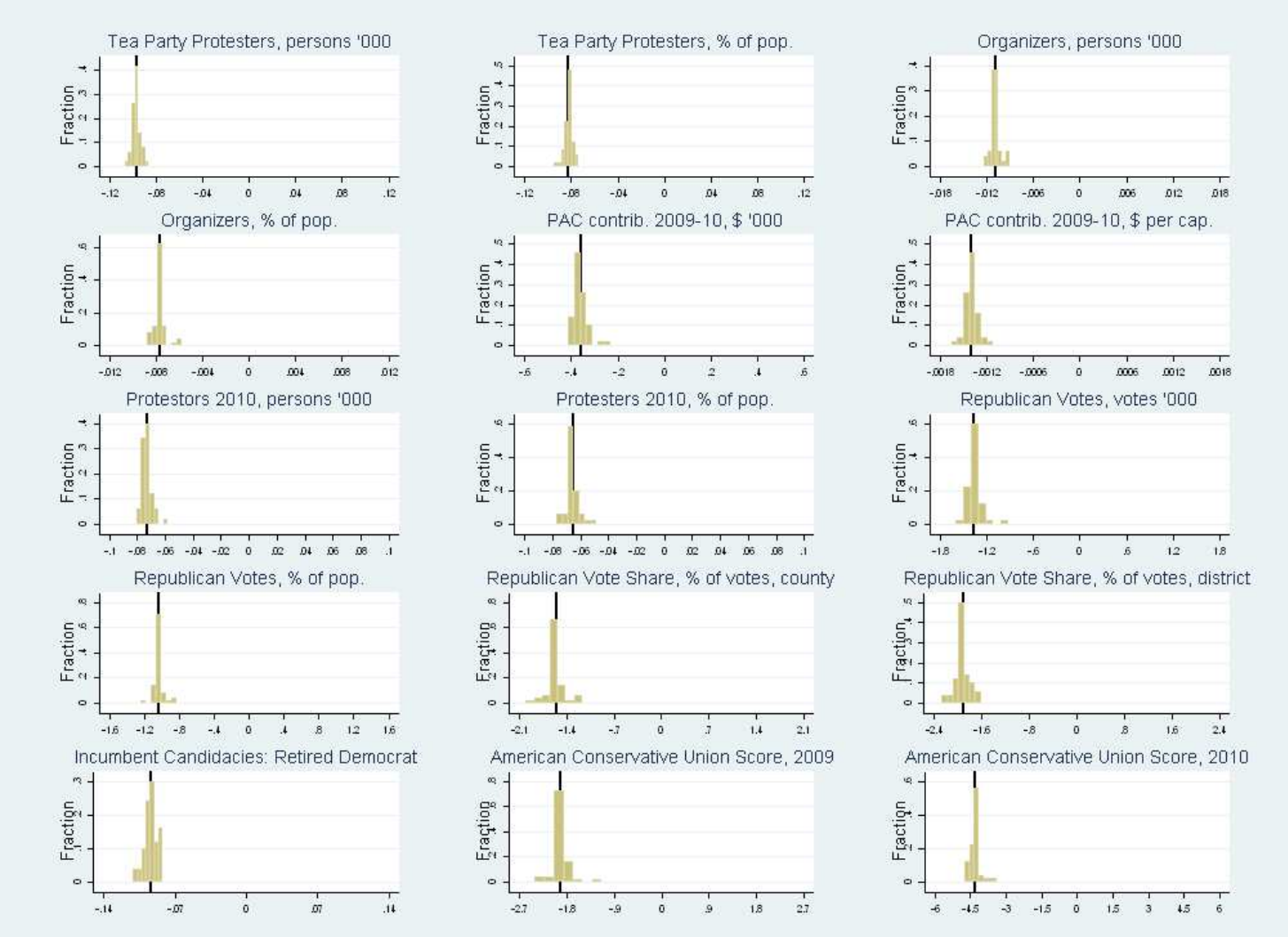

Figure A.2. The histograms show the distribution of the effect of rainfall on the day of the Tea Party rallies (April 15, 2009), when states are dropped one by one. Black lines indicate the estimated coefficient using the full sample.

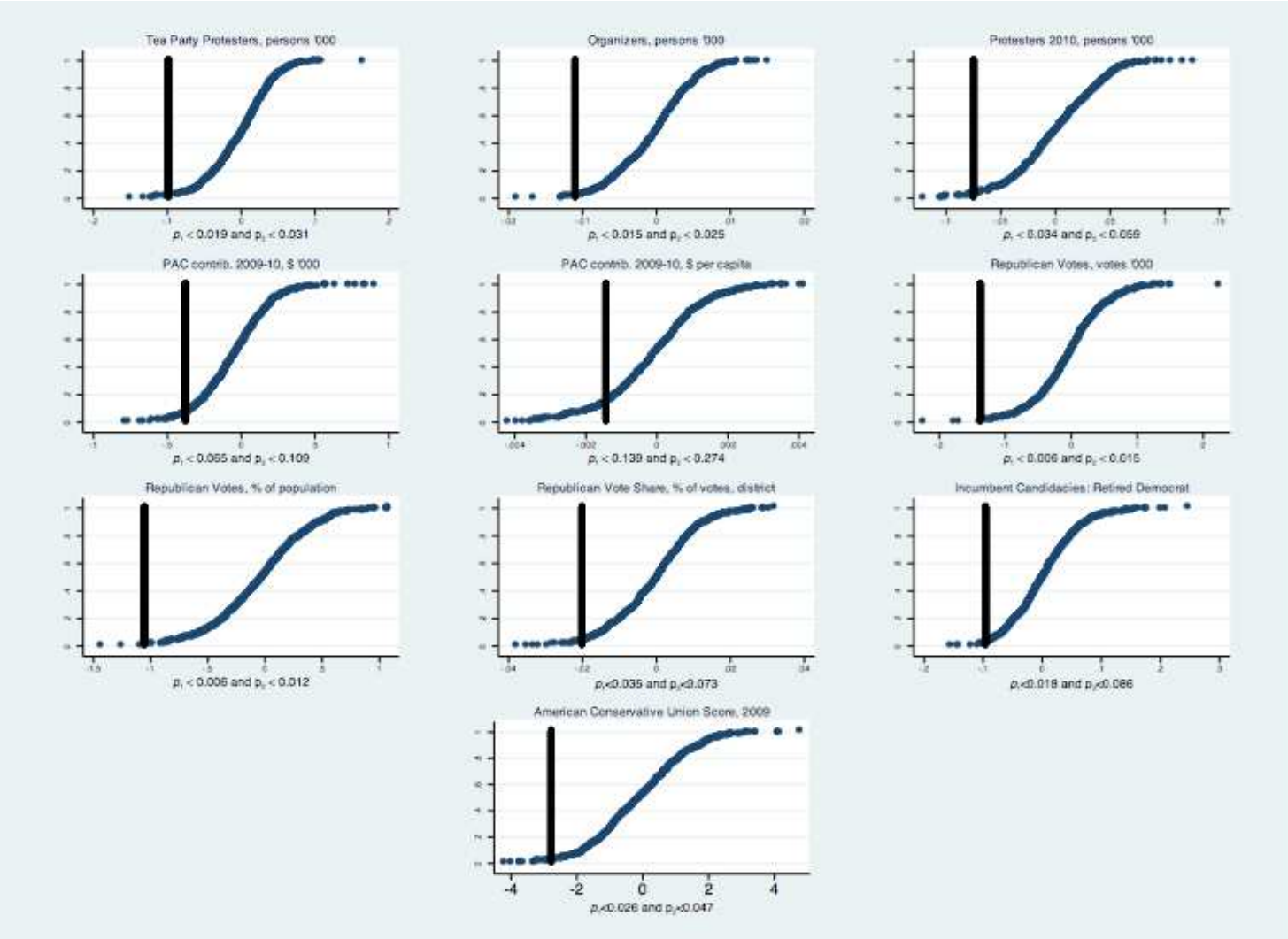

Figure A.3. The graphs show the main effect of rainfall on the day of the Tea Party rallies (April 15, 2009), compared to the cumulative distribution of estimates for rainfall from the placebo dates. Figure V in the main text contains the graphs for the remaining results. The placebo dates consist of each day in April between 1980 and 2008 where at least ten percent of the counties experience rain. The black line indicates the estimated coefficient on the day of the rallies. Under each graph two summary statistics are presented, where p_1 is the fraction of placebo estimates with more negative values compared to the estimate on the day of the rally, and p_2 is the fraction with larger absolute values.

III. Data Appendix

Section A lists the data we use, grouped by source. Section B describes how variables are defined and constructed.

A. Data Sources

American Community Survey 2009. Socio-demographic controls from the American Community Survey 2009 include: African-American population, difference in unemployment rate 2005-2009, foreign-born population, Hispanic population, median household income, population, unemployment rate, white population.

American Conservative Union 2011,"http://www.conservative.org/legislative-ratings". To gauge congressmen's voting record, we use roll-call ratings from the American Conservative Union that include: ACU score 2004, ACU score 2005, ACU score 2006, ACU score 2007, ACU score 2008, ACU score 2009, ACU score 2010.

Audit Bureau of Circulations 2011,"http://www.accessabc.com/products/penetration.htm". To measure local media coverage of the protests we use data on newspaper circulation from the Audit Bureau of Circulations and information from Newslibrary.com (see data description below). The data from the Audit Bureau of Circulations include circulation figures for roughly the 750 largest newspapers. We match the location data for 255 publications across 46 states and exclude publications with circulation below 15,000, as they turn out to be mostly trade journals. Among the highest-circulation papers still included are the Dallas Morning News, the San Diego Tribune, the Chicago Sun-Times, the Providence Journal, and the Columbus Dispatch.

American National Election Studies 2011,"http://www.electionstudies.org". To measure political beliefs, we use the American National Election Studies Evaluations of Government and Society Study from 2011. We include the following variables: Supports the Tea Party movement, Favorable view on Sarah Palin, Feels outraged about the way things are going in the country, Opposes raising taxes on income>$250K, Believes Americans today have less freedom compared to 2008, Unfavorable feelings towards President Obama, Reported likelihood of voting in the 2010 midterm election.

Dave Leip's Atlas of U.S. Presidential Elections 2011,"http://www.uselectionatlas.org". To measure election outcomes in the mid-term elections to the House of Representatives in 2010 as well as control for past congressional and presidential elections we use election variables extracted from Dave Leip's Atlas of U.S. Presidential Elections including (all variables concern election outcomes to the House of Representatives except for the Obama Vote Share 2008): Democratic Party Votes 2006, 2008 (log of number of votes), Democratic Party Votes 2002, 2004, 2006, 2008, 2010 (number of votes), Democratic Party Votes 2006, 2008, 2010 (vote as a percent of population), Democratic Party Vote Share 2002, 2004, 2006, 2008 (percent of vote), Obama Vote Share 2008 (percent of vote), Republican Party Votes 2006, 2008 (log of number of votes), Republican Party Votes 2002, 2004, 2006, 2008, 2010 (number of votes), Republican Party Votes 2006, 2008, 2010

(vote as a percent of population), Republican Party Vote Share 2002, 2004, 2006, 2008, 2010 (percent of vote), Total Votes 2006, 2008 (log of number of votes), Total Votes 2002, 2004, 2006, 2008 (number of votes), Total Votes 2006, 2008 (vote as a percent of population).

EconomyPolitics.com 2010,"http://www.economypolitics.com/2010/04/ever-wonder-how-many-people-actually.html". To measure attendance at April 15, 2010 rallies we use data from EconomyPolitics (2010) including the variables: Tea Party Protesters, 2010 (number of people) and Tea Party Protesters, 2010 (percent of population).

Federal Election Commission 2009-2010. Information on financial contributions to Our Country Deserves Better PAC, the fund-raising wing of the percentage, for 2009 and 2010 was obtained from the Federal Election Commission campaign finance reports. The data are aggregated to the county level and contain contributions by individuals up to $5,000. The financing reports also provide membership information within the Tea Party Express. The included variables are: PAC Contributions 2009 (number of $), PAC Contributions 2009 ($ per capita), PAC Contributions 2010 (number of $), PAC Contributions 2010 ($ per capita), PAC Contributions 2009-10 (number of $), PAC Contributions 2009-10 ($ per capita), Tea Party Organizers 2010 (number of people), Tea Party Organizers 2010 (percentage of population).

Google Insights for Search 2011, "http://www.google.com/insights/search/#q=%22tea%20party%22%20%20-%22Boston%20Tea%20Party%22%2C&geo=US&date=1%2F2007%2060m&cmpt=q". Information on the evolution of Tea Party web searches over the period 2007-2011 is extracted from Google Insights.

Institute for Research and Education on Human Rights 2010 (IREHR),"http://www.irehr.org/issue-areas/tea-party-nationalism". To measure attendance at the April 15, 2009 rallies we use data from IREHR, 2010 along with two other sources: Tea Party self-reports and the New York Times (see data description below). The relevant variables based on IREHR include: Protesters on April 15, 2009 (log of mean number of people), Protesters on April 15, 2009 (mean number of people), Protesters on April 15, 2009 (max number of people), Protesters on April 15, 2009 (percentage of population, mean), Protesters on April 15, 2009 (percentage of population, max). To measure Tea Party membership, we use membership estimates for June 2010 for the non-profit Tea Party organizations Tea Party Patriots, Americans for Prosperity, FreedomWorks, 1776 Tea Party, and ResistNet from the IREHR (2010). These five factions maintain their own social networking sites, with minimal privacy protections. The complete data from these sites have been collected on a daily basis since 2010 by the IREHR. The included variables are: Tea Party Organizers 2010 (number of people), Tea Party Organizers 2010 (percentage of population).

National Oceanic and Atmospheric Administration 2011,"http://www.ncdc.noaa.gov/oa/climate/climatedata.html". Data on precipitation at the county and congressional district level come from the National Oceanic and Atmospheric Administration and cover the period 1980-2010. Days with rainfall below 0.10 inches count as non-rainy; higher precipitation levels are defined as rainy. The variables included are: Rainy Protest (dummy variable and continuous measure) and Rain

Probability Dummies.

Newslibrary.com 2011,"http://newslibrary.com/". Our data on media coverage come from news articles using Newslibrary.com, which includes the archives of over 4,000 titles, but not those of large national newspapers such as the Wall Street Journal or the New York Times. We collected information on all articles containing the phrase "Tea Party" from January 1, 2009 through June 20, 2010. This data is matched with information on county-level circulation from the Audit Bureau of Circulations (see above).

New York Times, FiveThirtyEight - Nate Silver's Political Calculus, 2009,"http://www.fivethirtyeight.com/2009/04/how-many-attended-tea-parties.html". To measure attendance at the April 15, 2009 rallies we use data from New York Times, 2009 along with two other sources: Tea Party self-reports and the IREHR (see data description above and below). The relevant variables based on New York Times include: Protesters on April 15, 2009 (log of mean number of people), Protesters on April 15, 2009 (mean number of people), Protesters on April 15, 2009 (max number of people), Protesters on April 15, 2009 (percentage of population, mean), Protesters on April 15, 2009 (percentage of population, max).

SurgeUSA.org 2009,"http://www.surgeusa.org/actions/teapartycrowds.htm#crowds". To measure attendance at the April 15, 2009 rallies we use data from the Tea Party self-reports (SurgeUSA.org 2009) along with two other sources: the IREHR and the New York Times, 2009 (see data description above). The relevant variables based on SurgeUSA.org include: Protesters on April 15, 2009 (log of mean number of people), Protesters on April 15, 2009 (mean number of people), Protesters on April 15, 2009 (max number of people), Protesters on April 15, 2009 (percentage of population, mean), Protesters on April 15, 2009 (percentage of population, max).

United States Census Bureau 2010. Geographic controls from the United States Census Bureau 2010 include the variables: Region dummies.

United States Census 2000. Socio-demographic control from the United States Census 2000 includes the variable: Rural share of population.

United States Census 2010. Socio-demographic control from the United States Census 2010 includes the variable: Population density.

Wikipedia.org 2011,"http://en.wikipedia.org/wiki/United_States_House_of_Representatives_elections,_2010#Retiring_incumbents". Information on the decision of incumbent congressmen to retire prior to the 2010 midterms was obtained from Wikipedia and cross-checked with contemporary news sources. It includes the following variables: Retirement, Democrats and Retirement, Republicans.

B. Notes on Variables

1. Dependent variables at the county level

Election variables

Democratic Party Votes 2010 (number of votes). Number of Democratic Party votes in the 2010 mid-term election to the United States House of Representatives on November 2, 2010 (scaled by 1,000).

Democratic Party Votes 2010 (percentage of population). Number of Democratic Party votes relative the county population in the 2010 mid-term election to the United States House of Representatives on November 2, 2010.

Republican Party Votes 2010 (number of votes). Number of Republican Party votes in the 2010 mid-term election to the United States House of Representatives on November 2, 2010 (scaled by 1,000).

Republican Party Votes 2010 (percentage of population). Number of Republican Party votes relative the county population in the 2010 mid-term election to the United States House of Representatives on November 2, 2010.

Republican Party Vote Share 2010 (percentage of vote). Share of Republican Party vote in the 2010 mid-term election to the United States House of Representatives on November 2, 2010.

Protester variables

Protesters on April 15, 2009 (log of mean number of people). The logarithm of the number of people attending the Tax Day rallies on April 15, 2009. Based on the average attendance in a given county across the Tea Party self-reports, the New York Times, and the Institute for Research and Education on Human Rights.

Protesters on April 15, 2009 (mean number of people). Number of people attending the Tax Day rallies on April 15, 2009 (scaled by 1,000). Based on the average attendance in a given county across the Tea Party self-reports, the New York Times, and the Institute for Research and Education on Human Rights.

Protesters on April 15, 2009 (max number of people). Number of people attending the Tax Day rallies on April 15, 2009 (scaled by 1,000). Based on the highest reported attendance in a given county across the Tea Party self-reports, the New York Times, and the Institute for Research and Education on Human Rights.

Protesters on April 15, 2009 (percentage of population, mean). Number of people attending the Tax Day rallies on April 15, 2009 relative the county population. Based on the average attendance in a given county across the Tea Party self-reports, the New York Times, and the Institute for Research and Education on Human Rights.

Protesters on April 15, 2009 (percentage of population, max). Number of people attending the Tax Day rallies on April 15, 2009 relative the county population. Based on the highest reported attendance in a given county across the Tea Party self-reports, the New York Times, and the Institute for Research and Education on Human Rights.

Movement variables

Tea Party Organizers 2010 (number of people). Number of members of local Tea Party chapters in June 2010 (in thousands). Based on online membership postings from Tea Party Patriots, Americans for Prosperity, FreedomWorks, 1776 Tea Party, and ResistNet as collected by the Institute for Research and Education on Human Rights and on information from the Federal Election Commission on donations to Tea Party Express.

Tea Party Organizers 2010 (percentage of population). Number of members of local Tea Party chapters in June 2010 relative the county population. Based on online membership postings from Tea Party Patriots, Americans for Prosperity, FreedomWorks, 1776 Tea Party, and ResistNet as collected by the Institute for Research and Education on Human Rights and on information from the Federal Election Commission on donations to Tea Party Express.

Protesters on April 15, 2010 (number of people) Number of people attending the Tax Day rallies on April 15, 2010 (scaled by thousands). Based on the attendance numbers from EconomyPolitics.com 2010.

Protesters on April 15, 2010 (percentage of population) Number of people attending the Tax Day rallies on April 15, 2010 relative the county population. Based on the attendance numbers from EconomyPolitics.com 2010.

PAC contribution variables

PAC Contributions 2009 (number of $). Financial contributions made by individuals up to $5,000 aggregated at the county level to the political action committee Our Country Deserves Better PAC between April 16 and December 31, 2009 (scaled by 1,000).

PAC Contributions 2009 ($ per capita). Financial contributions made by individuals up to $5,000 relative the county population to the political action committee Our Country Deserves Better PAC between April 16 and December 31, 2009 (scaled by 1,000).

PAC Contributions 2010 (number of $). Financial contributions made by individuals up to $5,000 aggregated at the county level to the political action committee Our Country Deserves Better PAC between January 1 and December 31, 2010 (scaled by 1,000).

PAC Contributions 2010 ($ per capita). Financial contributions made by individuals up to $5,000 relative the county population to the political action committee Our Country Deserves Better PAC between January 1 and December 31, 2010 (scaled by 1,000).

PAC Contributions 2009-10 (number of $). Financial contributions made by individuals up to $5,000 aggregated at the county level to the political action committee Our Country Deserves Better PAC between April 16, 2009 and December 31, 2010 (scaled by 1,000).

PAC Contributions 2009-10 ($ per capita). Financial contributions made by individuals up to $5,000 relative the county population to the political action committee Our Country Deserves Better PAC between April 16, 2009 and December 31, 2010 (scaled by 1,000).

Media variable

Number of Articles Containing "Tea Party". The number of weekly newspaper articles in a given county that contains the phrase "Tea Party" between January 1, 2009 to June 20, 2010.

2. Independent variables at the county level

Demographic variables

African-American Population (percentage). The percentage of the county's population that was African-American in 2009.

Difference in Unemployment Rate 2005-2009. The difference in the county's unemployment rate between 2005 and 2009.

Foreign-born Population (percentage). The percentage of the county's population that was foreign born in 2009.

Hispanic Population (percentage). The percentage of the county's population that was Hispanic in 2009.

Median Household Income (log). The logarithm of the county's median household income in 2009.

Population. The county's total population in 2009.

Population Density (log). The logarithm of the county's population density in 2009.

Rural Population (percentage). The percentage of the county's population that was rural in 2000.

Unemployment Rate (percentage). The percentage of the county's population that was unemployed in 2009.

White Population (percentage). The percentage of the county's population that was white in 2009.

Election variables 2006

Democratic Party Votes 2006 (log of number of votes). The logarithm of the number of Democratic Party votes in the 2006 election to the United States House of Representatives on November 7, 2006.

Democratic Party Votes 2006 (number of votes). Number of Democratic Party votes in the 2006 election to the United States House of Representatives on November 7, 2006 (in thousands).

Democratic Party Votes 2006 (percentage of population). Number of Democratic Party votes relative the county population in the 2006 election to the United States House of Representatives on November 7, 2006.

Republican Votes 2006 (log of number of votes). The logarithm of the number of Republican Party votes in the 2006 election to the United States House of Representatives on November 7, 2006.

Republican Party Votes 2006 (number of votes). Number of Republican Party votes in the 2006 election to the United States House of Representatives on November 7, 2006 (in thousands).

Republican Party Votes 2006 (percentage of population). Number of Republican Party votes relative the county population in the 2006 election to the United States House of Representatives on November 7, 2006.

Republican Party Vote Share 2006 (percentage of vote). Share of Republican Party votes in the 2006 election to the United States House of Representatives on November 7, 2006.

Total Votes 2006 (log of number of votes). The logarithm of the number of total votes in the 2006 election to the United States House of Representatives on November 7, 2006.

Total Votes 2006 (number of votes). Number of total votes in the 2006 election to the United States House of Representatives on November 7, 2006 (in thousands).

Total Votes 2006 (percentage of population). Number of total votes relative the county population in the 2006 election to the United States House of Representatives on November 7, 2006.

Election variables 2008

Democratic Party Votes 2008 (log of number of votes). The logarithm of the number of Democratic Party votes in the 2008 election to the United States House of Representatives on November 4, 2008.

Democratic Party Votes 2008 (number of votes). Number of Democratic Party votes in the 2008 election to the United States House of Representatives on November 4, 2008 (in thousands).

Democratic Party Votes 2008 (percentage of population). Number of Democratic Party votes relative the county population in the 2008 election to the United States House of Representatives on November 4, 2008.

Obama Vote Share 2008 (percentage of vote). Share of Democratic Party votes in the 2008 United States presidential election on November 4, 2008.

Republican Party Votes 2008 (log of number of votes). The logarithm of the number of Republican Party votes in the 2008 election to the United States House of Representatives on November 4, 2008.

Republican Party Votes 2008 (number of votes). Number of Republican Party votes in the 2008 election to the United States House of Representatives on November 4, 2008 (in thousands).

Republican Party Votes 2008 (percentage of population). Number of Republican Party votes relative the county population in the 2008 election to the United States House of Representatives on November 4, 2008.

Republican Party Vote Share 2008 (percentage of vote). Share of Republican Party votes in the 2008 election to the United States House of Representatives on November 4, 2008.

Total Votes 2008 (log of number of votes). The logarithm of the number of total votes in the 2008 election to the United States House of Representatives on November 4, 2008.

Total Votes 2008 (number of votes). Number of total votes in the 2008 election to the United States House of Representatives on November 4, 2008 (in thousands).

Total Votes 2008 (percentage of population). Number of total votes relative the county population in the 2008 election to the United States House of Representatives on November 4, 2008.

Newspaper circulation variable

Newspaper Circulation Dummy. A dummy variable equal to one if the newspaper circulation-weighted rainfall in a given county exceeds 0.1 inches on April 15, 2009 and zero otherwise.

Geographical variables

Rainy Protest (continuous). Amount of rainfall measured continuously in hundredth of an inch in a given county on April 15, 2009.

Rainy Protest (dummy). Dummy variable equal to one if it rained more than 0.1 inches in a given county on April 15, 2009 and zero otherwise.

Rain Probability Dummies. Decile dummies equal to 1 if the probability that it rains more than 0.1 inches in April belongs to a given decile in a county over the period 1980-2008 and 0 otherwise. The dummies are constructed as follows. We first generate a dummy variable equal to 1 if the equally weighted average precipitation at all stations in the county exceeded 0.1 inches for the first day of each week in April from 1980-2008 and 0 otherwise. We then take the mean over all dates, leaving us with the likelihood of rain in a given county for the relevant time period. Finally, we

create nine dummy variables based on this distribution (9 dummies and one omitted category), one for each decile, equal to 1 if the probability in a county falls within the given range and 0 otherwise.

Region Dummies. The region dummies are equivalent of the 4 census regions: Northeast, Midwest, South, and West.

3. Dependent Variables at the Congressional District Level

Policy-making variables

ACU Score 2006. The American Conservative Union (ACU) score of each congressman's House voting record in 2008 on issues classified as conservative according to ACU on a scale 0-100: from 0 (most liberal) to 100 (most conservative).

ACU Score 2007. The American Conservative Union (ACU) score of each congressman's House voting record in 2008 on issues classified as conservative according to ACU on a scale 0-100: from 0 (most liberal) to 100 (most conservative).

ACU Score 2008. The American Conservative Union (ACU) score of each congressman's House voting record in 2008 on issues classified as conservative according to ACU on a scale 0-100: from 0 (most liberal) to 100 (most conservative).

ACU Score 2009. The American Conservative Union (ACU) score of each congressman's House voting record in 2009 on issues classified as conservative according to ACU on a scale 0-100: from 0 (most liberal) to 100 (most conservative).

ACU Score 2010. The American Conservative Union (ACU) score of each congressman's House voting record in 2010 on issues classified as conservative according to ACU on a scale 0-100: from 0 (most liberal) to 100 (most conservative).

Retirement: Democrats. A dummy variable equal to one if a Democratic incumbent in the United States House of Representatives did not seek reelection on November 2, 2010 and zero otherwise. The variable excludes incumbents who retired from office to run for state-wide office on November 2, 2010.

Retirement: Republicans. A dummy variable equal to one if a Republican incumbent in the United States House of Representatives did not seek reelection on November 2, 2010 and zero otherwise. The variable excludes incumbents who retired from office to run for state-wide office on November 2, 2010.

Polital beliefs' variables

Supports the Tea Party movement. A dummy variable equal to one if the respondent answered "a great deal" and zero if the respondent answered "a moderate amount" or "a little" to the question:

"Do you support the Tea Party movement?". "Supports the Tea Party movement" is based on the variable "c1_ba2_support" in the ANES study.

Favorable view on Sarah Palin. A dummy variable equal to one if the respondent answered "Like a great deal" or "Like a moderate amount" or "Like a little" and zero if the respondent answered "Neither like nor dislike", "Dislike a little", "Dislike a moderate amount", or "Dislike a great deal" to the question: "How much do you like or dislike each person [Sarah Palin]?". "Favorable view on Sarah Palin" is based on the variable "c1_k1d" in the ANES study.

Feels outraged about the way things are going in the country. A dummy variable equal to one if the respondent answered "Extremely" and zero if the respondent answered "Very", "Moderately", "A little", or "Not at all" to the question: "Generally speaking, how do feel about the way things are going in the country these days [How outraged?]". "Feels outraged about the way things are going in the country" is based on the variable "c1_g6" in the ANES study.

Opposes raising taxes on income>$250K. A dummy variable equal to one if the respondent answered "Oppose" and zero if the respondent answered "Favor" or "Neither favor nor oppose" to the question: "Do you favor, oppose, or neither favor nor oppose raising federal income taxes for people who make more than $250,000 per year". "Opposes raising taxes on income>$250K" is based on the variable "c1_ze1" in the ANES study.

Believes Americans today have less freedom compared to 2008. A dummy variable equal to one if the respondent answered "Less freedom today" and zero if the respondent answered "More Freedom today" or "The same amount of freedom today" to the question: "Compared to 2008, do Americans today have more freedom, less freedom, or the same amount of freedom?". "Believes Americans today have less freedom compared to 2008" is based on the variable "c1_za4" in the ANES study.

Unfavorable feelings towards President Obama. A dummy variable equal to one if the respondent answered "Unfavorable" and zero if the respondent answered "Favorable", "Somewhat favorable", "Neither favorable nor unfavorable", or "Somewhat unfavorable" to the question: "Please rate your feelings towards Barack Obama. Is your overall impression of him...". "Unfavorable feelings towards President Obama" is based on the variable "c1_pp016" in the ANES study.

Reported likelihood of voting in the 2010 midterm election. A continuous variable equal to the question: "What is the percentage chance that you will vote in the Congressional elections this November?". "Reported likelihood of voting in the 2010 midterm election" is based on the variable "c1_a4" in the ANES study.

Election variables

Republican Party Vote Share 2010 (percentage of vote). Share of Republican Party vote in the 2010 mid-term election to the United States House of Representatives on November 2, 2010.

4. Independent Variables at the District Level

In addition to the set of independent variables included at the county level (now aggregated at the level of the congressional district), the district level also comprises the following covariates.

Demographic variables

Age. The age of the respondent in 2010. 'Age" is based on the variable "c1_ppage" in the ANES study.

Education, Categorical (1-4). The education of the respondent based on the following 4 categories: 1. Less than high school; 2. High school; 3. Some college; 4. Bachelor's degree or higher.'Education" is based on the variable "c1_ppeducat" in the ANES study.

Household Income, Categorical (1-19). The household income of the respondent based on 19 categories ranging from "Less than $5,000" to "$175,000 or more". "Household Income" is based on the variable "c1_ppincimp" in the ANES study.

Currently Working. A dummy variable equal to one if the respondent answered "Working - as a paid employee" or "Working - self-employed" and zero otherwise to the question: "Current employment status". "Currently Working" is based on the variable "c1_ppwork" in the ANES study.

White. White respondent. "White" is based on the variable "c1_cap_ppeth" in the ANES study.

African American. African-American respondent. "African American" is based on the variable "c1_cap_ppeth" in the ANES study.

Hispanic. Hispanic respondent. "Hispanic" is based on the variable "c1_cap_ppeth" in the ANES study.

Foreign born. Foreign-born respondent. "Foreign born" is based on the variable "c1_pp198" in the ANES study.

Rural. A dummy variable equal to one if the respondent lives in a "Non-Metro area" and zero otherwise. "Rural" is based on the variable "c1_ppmsacat" in the ANES study.

Voted for the Republican Party to the House of Representatives, 2008. A dummy variable equal to one if the respondent answered "The Republican candidate" and zero otherwise to the question: "Which candidate did you vote for in your Congressional district in 2008?". "Voted for the Republican Party to the House of Representatives, 2008" is based on the variable "c1_pp007" in the ANES study.

Election variables 2002

Democratic Party Votes 2002 (number of votes). Number of Democratic Party votes in the 2002 election to the United States House of Representatives on November 5, 2002 (in thousands).

Republican Party Votes 2002 (number of votes). Number of Republican Party votes in the 2002 election to the United States House of Representatives on November 5, 2002 (in thousands).

Republican Party Vote Share 2002 (percentage of vote). Share of Republican Party votes in the 2002 election to the United States House of Representatives on November 5, 2002.

Total Votes 2002 (number of votes). Number of total votes in the 2002 election to the United States House of Representatives on November 5, 2002 (in thousands).

Election variables 2004

Democratic Party Votes 2004 (number of votes). Number of Democratic Party votes in the 2004 election to the United States House of Representatives on November 2, 2004 (in thousands).

Republican Party Votes 2004 (number of votes). Number of Republican Party votes in the 2004 election to the United States House of Representatives on November 2, 2004 (in thousands).

Republican Party Vote Share 2004 (percentage of vote). Share of Republican Party votes in the 2004 election to the United States House of Representatives on November 2, 2004.

Total Votes 2004 (number of votes). Number of total votes in the 2004 election to the United States House of Representatives on November 2, 2004 (in thousands).

Policy-making variables

ACU Score 2004. The American Conservative Union (ACU) score of each congressman's House voting record in 2004 on issues classified as conservative according to ACU on a scale 0-100: from 0 (most liberal) to 100 (most conservative).

ACU Score 2005. The American Conservative Union (ACU) score of each congressman's House voting record in 2005 on issues classified as conservative according to ACU on a scale 0-100: from 0 (most liberal) to 100 (most conservative).

ACU Score 2006. The American Conservative Union (ACU) score of each congressman's House voting record in 2006 on issues classified as conservative according to ACU on a scale 0-100: from 0 (most liberal) to 100 (most conservative).

ACU Score 2007. The American Conservative Union (ACU) score of each congressman's House voting record in 2007 on issues classified as conservative according to ACU on a scale 0-100: from 0 (most liberal) to 100 (most conservative).

ACU Score 2008. The American Conservative Union (ACU) score of each congressman's House voting record in 2008 on issues classified as conservative according to ACU on a scale 0-100: from 0 (most liberal) to 100 (most conservative).